SERVICE BULLETIN

Kodak X-Omat PROCESSOR

Eastman Kodak Company, Health Imaging, Rochester, New York 14650

SERVICE BULLETIN NO. 279

FEBRUARY 1998

3058 *Kodak X-Omat* MULTILOADER 300
3059 *Kodak X-Omat* 270 RA PROCESSOR
3198 *Kodak X-Omat* 180 LP PROCESSOR
3227 *Kodak X-Omat* 180 LPS PROCESSOR
3434 *Kodak X-Omat* 3000 RA PROCESSOR
3511 *Kodak X-Omat* MULTILOADER 300 PLUS

Servicing the New *Kodak X-Omat* MULTILOADER 300 PLUS with a *Kodak X-Omat* 3000 RA INTEGRATED PROCESSOR

The MULTILOADER 300 PLUS is now available for sale. Service personnel, previously trained on the MULTILOADER 300 with a *Kodak X-Omat* 270 RA INTEGRATED PROCESSOR do not require any additional training to service the new MULTILOADER 300 PLUS with a *Kodak X-Omat* 3000 RA INTEGRATED PROCESSOR.

Changes Incorporated in the *Kodak X-Omat* MULTILOADER 300 PLUS

The *Kodak X-Omat* 270 RA INTEGRATED PROCESSOR is replaced with the *Kodak X-Omat* 3000 RA INTEGRATED PROCESSOR. The *Kodak X-Omat* 3000 RA INTEGRATED PROCESSOR incorporates most of the components and features of the stand-alone *Kodak X-Omat* 3000 RA PROCESSOR.

The ENTRANCE DETECTOR SWITCHES are removed from the PROCESSOR. Two EXIT SENSORS, B25 and B26, are added to the MULTILOADER INTERFACE to sense films leaving the MULTILOADER and entering the PROCESSOR.

New operating and diagnostic service software is used for the PROCESSOR. New operating software is used along with the existing service software for the MULTILOADER. The existing service software does not show the new B25 and B26 SENSORS on the display, but will give an audible signal when the SENSORS change state.

See the quick reference table for a comparison of all mid volume PROCESSORS.

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Use the Following Publications and Software To Service the New *Kodak X-Omat* MULTILOADER 300 PLUS

MULTILOADER Publications

In addition to the items currently used to service the MULTILOADER 300 the following Publications and software are necessary to service the MULTILOADER 300 PLUS.

The new MULTILOADER Publications include the *Kodak X-Omat* MULTILOADER 300 and the *Kodak X-Omat* MULTILOADER 300 PLUS. Replace the following Publications in your *Kodak X-Omat* MULTILOADER 300 binders with the following revised *Kodak X-Omat* MULTILOADER 300 and 300 PLUS Publications.

Publication	Part No.
Installation Instructions	II3058-4
Parts List	IP3058-4
Site Specifications	SS3511-1
*Wiring Diagrams Supplement	WD3058-4
*Service Manual Supplement	SM3058-5

*Add to the current Service Manual sections of Book 1

PROCESSOR Publications

Use only the following new publications for the *Kodak X-Omat* 3000 RA INTEGRATED PROCESSOR. The existing *Kodak X-Omat* 270 RA INTEGRATED PROCESSOR Publications should be kept.

Part No. 7C8754, includes the following Publications with a binder.

Publication	Part No.
Adjustments and Replacements	7C8285
Component Locator	7C8286
Diagrams	7C8287
Parts List	7C8288
Preventive Maintenance	7C8289
Diagnostics	7C8290
Theory Guide	7C8756

Software

Software Diskette	Used In	Part No.
Kodak X-Omat MULTILOADER 300 PLUS Operating Software Download Diskette	MULTILOADER 300 PLUS only.	9219226
Processor Download Diskette	3000 RA Integrated only	7C8515
Processor Diagnostics Diskette	180 LP and 180 LPS 270 RA stand-alone 270 RA Integrated 3000 RA Integrated *Kodak X-Omat* 460 RA PROCESSOR *Kodak X-Omat* 480 RA PROCESSOR	7C8444

Dave Green, Service Engineer, Rochester

For More Information:

U.S. Distributors Contact:

Health Imaging
Film Handling TAC
1-800-822-1414

GCSS Personnel Contact:

Film Handling TAC

U.S.:	1-800-822-1414
Canada:	1-800-433-1414
International:	716-724-4675

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HEALTH IMAGING

EASTMAN KODAK COMPANY • ROCHESTER, N.Y. 14650

Quick Reference Comparison of Mid-Volume Processors

Table 1:

Features / Components / Associated Service Effects	[1] 180 LP/LPS	270RA	3000RA	270 Int in ML300	3000 Int in ML300
• **500 Microprocessor Board**	X	X		X	X
• **5000 Microprocessor Board**			X		
• **Portable Computer Diagnostics**	X	X		X	X
• **Internal Diagnostics**			X		
• **Removable Main Operating Software** Software EEPROMS may be changed or a Portable computer may be used for downloading software	X	X		X	X
• **Non-removable Main Operating Software** Portable Computer required for software upgrade or downloading new software when installing a new 5000 board			X		
• **Non-removable RAM on 500 Board** Any custom setting must be reprogrammed when changing the 500 board	X	X		X	X
• **Removable RAM on 5000 Board** RAM with custom setting can be transferred from old to new 5000 board			X		
• **Original Dryer System** Smaller blower and heater, overtemperature thermostat must be manually reset, airflow switch protects processor	X	X		X	
• **Updated Dryer System** Larger blower and heater, overtemperature thermostat automatically resets, thermal cutoff mounted near heater to protect processor			X		X
• **Original Quad Power Supply**	X	X	X	X	
• **Updated Power Supply**					X
• **Original Drive Motor & Motor Controller**	X	X		X	
• **Updated Drive Motor & Motor Controller**			X		X
• **200 Interface Board** (Transformer for electrical isolation)		X			
• **2000 Interface Board** (Separate 5V Power Supply for electrical isolation)			X		
• **No Interface Board** (No Separate Power Source)	X			X	X

Quick Reference Comparison of Mid-Volume Processors

Table 1:

Features / Components / Associated Service Effects	[1] 180 LP/LPS	270RA	3000RA	270 Int in ML300	3000 Int in ML300
• **No Interlock Board** Software disables drive when cover is raised or processor is pulled out	X	X		X	
• **7000 Interlock Board** Disables drive when cover is raised or processor is pulled out			X		X
• **5600 Film Accumulator Board** (measures film area)		X			
• **6000 Film Accumulator Board** (measures film area)			X		
• **No Film Accumulator Board** (Film area information from ML300 or 2180)	X			X	X
• **No Current Sense Board** Rate of temperature change used to generate heater error	X	X		X	X
• **8000 Current Sense Board** Monitors heater current to generate error if circuit opens			X		
• **300 Display Board**		X			
• **3000 Display Board**			X		
• **No Display Board** (information displayed on ML300 PLUS or 2180)	X			X	X
• **Entrance Detector Switches**	X	X	X	X	
• **No Entrance Detector Switches** Multiloader Exit Sensor performs function					X
• **Sleep Mode Feature Unavailable**	X	X		X	
• **Sleep Mode Feature**			X		X
• **270 Style Developer and Fixer Racks**	X	X		X	
• **3000 Style Developer and Fixer Racks**			X		X
• **Original Tank and Wash System with Yoke**	X	X		X	
• **Updated Tank and Wash System with Water Reservoir**	[2] X		X	[3] X	X

[1] The names used in this Quick Reference are NOT official product names.

[2] Serial # 3000 and above (180LP)
Serial # 13000 and above (180 LPS)

[3] Serial # 1300 and above